

Amendment to the Claims:

This listing of the claims will replace all prior listings of the claims.

Claims 1-39 (Canceled)

40. (Currently Amended) A method of producing a transgenic mouse whose genome comprises a null allele of the ~~disruption in an~~ endogenous mSTp1 sulfotransferase gene, the method comprising:

- a. ~~introducing a targeting construct into a mouse embryonic stem cell, wherein the targeting construct disrupts the endogenous sulfotransferase gene;~~
- [[b.]] a. providing ~~selecting~~ a mouse embryonic stem cell whose genome comprises a null allele of the endogenous mSTp1 ~~disrupted~~ sulfotransferase gene;
- [[c.]] b. ~~introducing the mouse embryonic stem cell whose genome comprises the disrupted sulfotransferase gene into a blastocyst;~~
- [[d.]] c. implanting the blastocyst into a pseudopregnant mouse, wherein said pseudopregnant mouse becomes pregnant and gives birth to a chimeric mouse; and
- [[e.]] d. breeding the chimeric mouse to produce the transgenic mouse, wherein the transgenic mouse, when homozygous for said null allele of the endogenous mSTp1 sulfotransferase gene ~~a disruption in the sulfotransferase gene~~, lacks expression of functional mSTp1 sulfotransferase and exhibits a behavioral abnormality.

41. (Previously Presented) The transgenic mouse of claim 53, wherein said mouse exhibits, relative to a wild-type control mouse, aggressive behavior.

42. (Previously Presented) The transgenic mouse of claim 53, wherein the transgenic mouse exhibits, relative to a wild-type control mouse, hyperactivity.

43. (Previously Presented) The transgenic mouse of claim 53, wherein said mouse exhibits, relative to a wild-type control mouse, decreased anxiety.

Claims 44-48 (Canceled)

49. (Previously Presented) A cell or tissue isolated from the transgenic mouse of claim 50.

50. (Currently Amended) A transgenic mouse whose genome comprises a null allele of the endogenous mSTp1 sulfotransferase gene allele, ~~wherein said null allele comprises exogenous DNA.~~

51. (Canceled)

52. (Previously Presented) The transgenic mouse of claim 50, wherein said mouse is heterozygous for said null allele.

53. (Previously Presented) The transgenic mouse of claim 50, wherein said mouse is homozygous for said null allele.

54. (Previously Presented) The transgenic mouse of claim 53, wherein said mouse exhibits in the liver at least one of the following: patchy pallor of acinar zone 3 hepatocytes, eosinophilic globules with intranuclear invaginations within the cytoplasm of hepatocytes and anisocytosis, anisonucleosis and increased mitotic cellular activity, relative to a wild-type control mouse.

55. (Previously Presented) The transgenic mouse of claim 53, wherein said mouse exhibits in the Harderian glands and salivary glands, at least one of the following: focal pigment deposition, atrophy and fibrosis.

56. (Currently Amended) The transgenic mouse of claim 50 wherein said null allele comprises exogenous DNA ~~comprises~~ a gene encoding a selection marker.

57. (Currently Amended) The transgenic mouse of claim 56 wherein said gene encoding a selection marker is a neomycin ~~resistant~~ resistance gene.